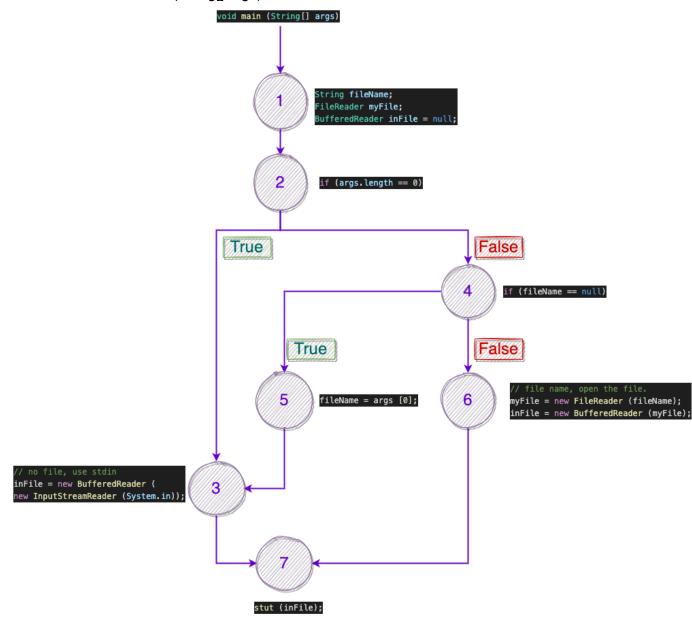
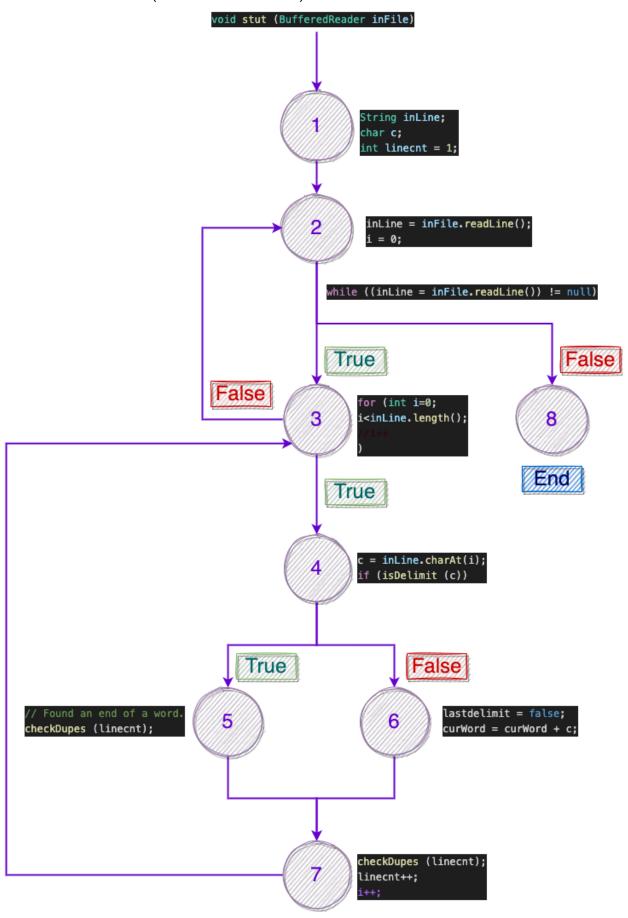
## Homework 3: Test for Stutter 310551017 王志嘉

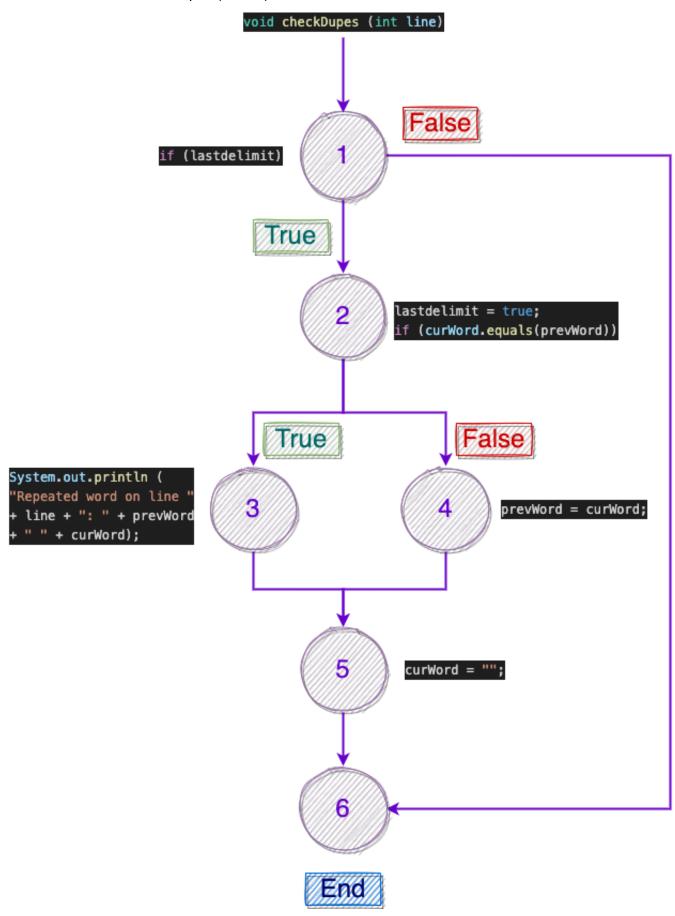
- A. Draw control flow graphs for the methods in Stutter.
  - void main (String[] args)



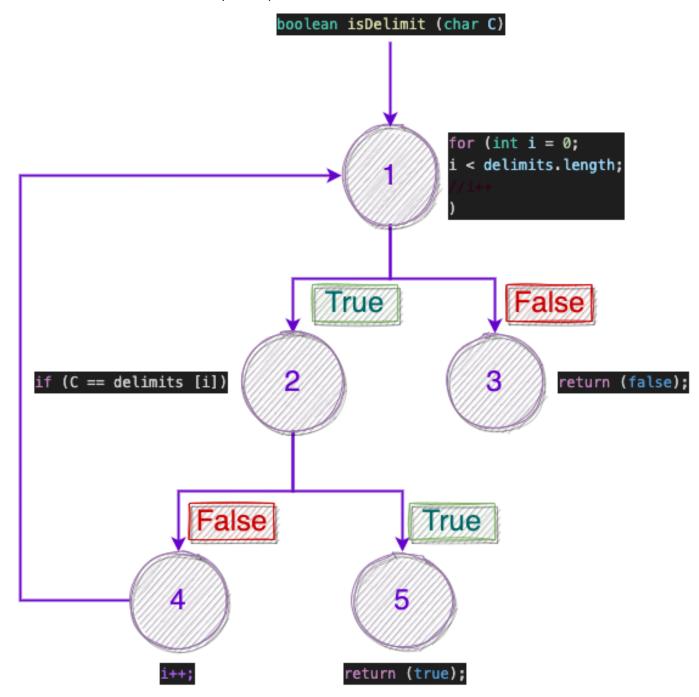
• void stut (BufferedReader inFile)



• void checkDupes (int line)



• boolean isDelimit (char C)



## B. List all the call sites. 行數基準 https://cs.gmu.edu/~offutt/softwaretest/java/Stutter.num

No.	Line	Call	
1	46	stut (inFile)	
2	63	isDelimit (c)	
3	65	checkDupes (linecnt)	
4	73	checkDupes (linecnt)	

C. List all coupling du-pairs for each call site. 行數基準 <a href="https://cs.gmu.edu/~offutt/softwaretest/java/Stutter.num">https://cs.gmu.edu/~offutt/softwaretest/java/Stutter.num</a>

No.	Last-def [methodName, variableName, line]	First-Use [methodName, variableName, line]
1	[main, inFile, 30]	[stut, inFile, 56]
2	[main, inFile, 37]	[stut, inFile, 56]
3	[main, inFile, 42]	[stut, inFile, 56]
4	[stut, linecnt, 55]	[checkDupes, line, 88]
5	[stut, linecnt, 74]	[checkDupes, line, 88]
6	[stut, c, 61]	[isDelimit, C, 102]
7	[isDelimit, **noVariable**, 103]	[isDelimit, **noVariable**, 63]
8	[isDelimit, **noVariable**, 104]	[isDelimit, **noVariable**, 63]

D. Create test data to satisfy All-Coupling Use Coverage for Stutter. 行數基準 <a href="https://cs.gmu.edu/~offutt/softwaretest/java/Stutter.num">https://cs.gmu.edu/~offutt/softwaretest/java/Stutter.num</a>

No.	args.length	args[0]	In-File
1	0		"HelloWorld" (System.in)
2	1	null	"HelloWorld" (System.in)
3	1	fileName	"HelloWorld" (fileContent)
4	1	fileName	"Hello;Hello"
5	1	fileName	"Hello\nHello"
6	1	fileName	"Hello;Hello"
7	1	fileName	"Hello;Hello"
8	1	fileName	"Hello;Hello"